OPHTHALMIC MEDICAL ASSISTING

(Cip 51.0804)

OCCUPATIONAL SKILLS

The student demonstrates the specified level of competency in occupational skills

No-exposure	Introduced	Practiced	Entry-level	Competency
0	1	2	3	4

SECTION 1 – HEALTH CAREERS

01234 A. ????? Demonstrate general knowledge of health careers, emphasizing allied health careers. Knowledge is to include educational requirements, job descriptions, career ladder options and employment opportunities.

1.18, 3.15, 3.16, 7.5

A.001 List major areas in the health career field, comparing education requirements of various health careers.

A.002 Give examples of tasks required of various health career paths.

A.003 Demonstrate familiarity with career ladder options in the health field, and opportunities for advancement.

A.004 Differentiate pros and cons associated with health careers.

01234 B. ????? **Understand what it is to be an Ophthalmic Medical Assistant.**

1.18, 3.15, 3.16, 7.5

B.001 Recognize educational requirements for all levels of ophthalmic assisting as outlined by the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO).

B.002 Give examples of technical skills required in ophthalmic assisting.

B.003 Demonstrate familiarity with career ladder options in ophthalmic assisting.

B.004 Indicate understanding of salary expectations for ophthalmic assisting.

B.005 Describe professional expectations and general working conditions of the work atmosphere.

01234 C. ????? **Understand the legal and ethical standards of conduct expected in he profession.**

1.18, 3.3, 3.10, 3.11, 3.13, 3.7, 7.5

C.001 Identify standard OSHA/HIPPA guidelines provided by employer to employees.

C.002 Define standards of conduct required in the health care field.

C.003 Understand the need for total confidentiality in the work place.

C.004 Describe the legal responsibility for documentation of client care.

C.005 Describe the legal actions of one's own actions, and explain any licensing regulations related to one's practice.

C.006 Describe steps necessary to maintain confidentiality in handling documentation of care.

C.007 Recognize the need and responsibility for documentation, client interactions and communication.

C.008 Demonstrate knowledge of clients' rights, issues and ethics related to them.

01234 D. Demonstrate work place safety skills.
????? 1.18, 3.5, 7.14, ? 7.18

D.001 Define body mechanics and demonstrate correct use of body mechanics.

D.002 Describe the components of a safe health care environment.

D.003 Follow appropriate emergency procedures for the work place, such as 911-type systems for fire and other emergencies.

D.004 Demonstrate actions to be taken in event of fire and other disasters.

D.005 Demonstrate appropriate dress for safety in the work place.

D.006 Identify hazardous materials used in the work place, knowing how to read and interpret a Material Safety Data Sheet.

D.007 Identify and apply OSHA regulations in the work place.

D.008 Demonstrate the use of proper clothing, shields (gloves, masks, and safety glasses), and other safety equipment.

01234 E. Demonstrate the communication skills necessary for good
? ???? interpersonal relationships e.g., verbal, non-verbal, objective reporting, subjective reporting, listening, etc.
1.5, 1.15, 3.10, 3.11, 3.12

E.001 Demonstrate ways of communicating with people who have experienced sensory deprivation and cognitive impairment**.**

E.002 Demonstrate correct telephone technique and message taking.

E.003 Write a business letter correctly.

E.004 Communicate effectively with members of the medical team, realizing the importance of teamwork and cooperation with co-workers to provide safe, high quality care.

E.005 Contribute input relevant to client's plan of care.

NO E.006

E.007 Use senses of sight, touch, hearing, and smell for observation.

E.008 Select professional attire and body art in accordance with the professional guidelines of the supervising ophthalmologist.

01234 F. Understand theory and demonstrate medical aspects.
????? 1.18, 7.14

F.001 Explain the theory of and demonstrate the practice of medical aspects.

F.002 Explain the infectious process in the transmission of disease, identifying different forms of

F.003 Complete OSHA blood borne pathogen training.

01234 G. Identify the basic needs of individuals (social, physical,
????? physiological and spiritual) and ways to meet those needs.
4.3, 4.4, 5.17

G.001 Identify the culture and social diversity of individuals as it affects the attitude and practices of the health worker.

G.002 Identify emotions that influence behavior and ways of modifying the behaviors.

G.003 Identify methods and techniques to support clients and their families through the decision making process consistent with the client's dignity.

G.004 List behaviors influenced by illness, hereditary factors, and environment that could be exhibited by a client.

G.005 Demonstrate techniques for addressing the unique needs of individuals with dementia.

01234 H. Demonstrate knowledge of basic first aid.
????? **?, 7.13, 7.14**

H.001 Demonstrate knowledge of basic first aid.

H.002 Perform CPR on adult, child, and infant manikins.

H.003 Earn CPR certification.

Section 2 – Ophthalmic Assisting

Demonstrate Ophthalmic medical assistant skills and knowledge of theory prescribed for the JCAHPO national certifying exam. Demonstrate total confidentiality in the work place.

A. Demonstrate knowledge of basic human anatomy and physiology, body systems, organs, and functions.
1.3, 1.13, 3.5, 7.1, 7.11, 7.14, 7.18

B. Demonstrate the procedure for and the recording of vital signs and physical measurements.
1.14, 1.17, 1.20, 7.1, 7.6

C. Demonstrate the ability to properly acquire a patient's medical history in order to reveal and record all past medical information useful for diagnosing and treating the present condition of a person's eye.
1.3, 1.6, 1.13, 1.17, 7.1, 1.20

D. Demonstrate proper visual acuity testing to determine the basic ability of a person to see both near and far, and to identify colors accurately.
1.3, 1.13, 1.17, 1.20, 7.1, 7.6

E. Apply basic optics necessary to measure the power of corrective lenes using a lensometer.
1.3, 1.13, 1.17, 1.20, 2.5, 7.1, 7.6, 7.7, 7.10

F. Demonstrate a basic understanding of the refractive elements of the cornea as well as using an automated and non-automated keratometer.
1.3, 1.13, 1.20, 1.17, 2.5, 7.1, 7.6

G. Perform pupil assessment to check the condition and response of the iris.
1.3, 1.13, 1.17, 1.20, 7.1, 7.6

H. Understand and be able to access the function of all eye muscles as they work together in all gaze positions and conduct stero acuity testing.
1.3, 1.13, 1.17, 1.20, 7.1

I. Perform a gross external examination to discover any general external abnormalities that can be associated with eye problems.
1.3, 1.13, 1.17, 1.20, 7.1

J. Properly use the slit lamp microscope to illuminate structural elements of the eye for use in documentation.
1.3, 1.13, 1.17, 1.20, 7.1

K. Demonstrate a basic understanding of internal eye pressure and its implications, to understand how a contact tonometer works, and to measure eye pressure when required.
1.3, 1.13, 1.17, 1.20, 7.1, 7.6

L. Assess the anterior chamber depth to determine whether a pupil can be safely dilated without causing a blockage of fluid.
1.3, 1.13, 1.17, 1.20, 7.1

M. Provide a permanent descriptive record of the size, shape and density of cataracts.
1.3, 1.13, 1.17, 1.20, 7.1

N. Apply the fundamentals of ocular pharmacology in order to identify common ocular medications and their effects, and properly instill eye drops into patient's eyes ensuring safety and comfort of patients.
1.3, 1.13, 1.17, 1.20, 7.1, 7.6

O. Demonstrate instrument maintenance to help ensure that the instruments continue to work according to their design and to help assistants achieve a reasonable amount of independence as they use these instruments.
1.3, 1.13, 1.17, 7.1

P. Show a broad understanding of practical optics to understand the principles of light.
1.3, 1.13, 1.17, 2.5, 7.1, 7.6, 7.7, 7.8, 7.10

Q. Measure the subjective refractive errors of eyes,(refractometry)
1.3, 1.13, 1.17, 2.5, 7.1, 7.6, 1.20

R. Display a working knowledge of the retinoscope to obtain an objective refraction of eyes.
1.3, 1.13, 1.17, 1.20, 2.3, 2.5, 7.1, 7.6, 7.10

S. Describe steps to be taken in emergency/urgent patient screening where immediate treatment may be necessary.
1.3, 1.13, 2.2, 1.20, 7.1

T. Show the ability to educate patients to ensure that they are well informed about all important aspects of their eyes and the care being offered throughout their experience at the medical center.
1.3, 1.13

U. Show the ability to map the scope of vision of the eyes to detect abnormal blind spots using the Humphrey and Goldmann visual field machines, as well as perform a confrontational visual field analysis.
1.3, 1.13, 1.17, 2.3, 1.20, 7.1, 7.6

V. Inform students about the types, the characteristics, and the wearing considerations of contact lenses.
1.3, 1.13, 7.1

W. Identify various surgical techniques to gain a general understanding of the common procedures performed and, thereby, realize the potential and the limitations of modern ophthalmic surgery.
1.3, 1.13, ?5.1, 7.5, (laser) 7.12eee

X. Identify minor surgical instruments and their uses, to care for them, and to prepare the way for surgical assisting.
1.3, 1.13, 1.20

Y. Apply the fundamentals of ophthalmic photography and produce clear images with a fundus camera.
1.3, 1.13, 1.20, 7.1, 7.6

Z. Demonstrate proper use of A-scan ultrasonography to measure the length of eyes and, along with keratometry, calculate the power of intraocular lenses to be used after cataract extraction.
1.3, 1.13, 1.17, 1.20, 2.5, 7.1, 7.6, 7.10

01234 A. ????? **Demonstrate knowledge of basic human anatomy and physiology, body systems, organs, and functions.**

A.001 Demonstrate knowledge of major body systems to include the lymphatic, endocrine, circulatory, respiratory, and nervous system.

A.002 Understand general medical problems associated with our body systems, e.g. diabetes mellitus, hypertension, rheumatoid arthritis, thyroid disease, cancers, autoimmune disease, immune deficiency disorders, hematological disorders and infections as they relate to the eye.

A.003 List, define, and use the medical terms and abbreviations commonly used in the health field.

A.004 Describe the visual pathway and label parts of the ocular system.

01234 B. ????? Demonstrate the procedure for and recording of vital signs and physical measurements.

B.001 Demonstrate proper measurement of vital signs, (blood pressure, pulse, and respirations), and recording of the measurements and parameters for reporting.

B.002 Measure, record, and report height, weight, and temperature.

01234 C. ????? Demonstrate the ability to properly acquire a patient's medical history in order to reveal and record all past medical information useful for diagnosing and treating the present condition of a person's eye.

C.001 Explain the purpose and importance of history taking.

C.002 Conduct the history in the manner and format required by the supervising ophthalmologist.

C.003 Obtain and record past and present medical information useful in diagnosing, treating, and diagnosing the present condition of the eyes to include chief complaint, past general history of the eyes, general family history, past and present systemic illnesses, medicines and allergies and adverse drug reactions.

C.004 Record the information completely, clearly, and accurately in the appropriate place, using accepted abbreviations only.

01234 D. ????? Demonstrate proper visual acuity testing to determine the basic ability of a person to see both near and far and to identify colors accurately.

D.001 Identify the major anatomical structures of the visual pathway.

D.002 Describe the pathway of light through the eye.

D.003 Explain the transfer of nerve impulses from the retina to the brain.

D.004 Explain why visual acuity testing is of major significance in assessing the status and the health of the eyes during the initial and subsequent examinations.

D.005 Prepare the chart projector and testing area.

D.006 Instruct the patient clearly on how to respond in each testing situation.

D.007 Conduct the following tests, near and distance, color vision using color plates, other vision tests like the E-chart, count fingers, and the pinhole.

D.008 Conduct a visual acuity on a child using appropriate charts.

D.009 Record the test results completely, clearly, and accurately in the appropriate place, using accepted abbreviations only.

01234 ????? E. Apply basic optics necessary to measure the power of corrective lenses using a lensometer.

E.001 Describe the following optical concepts both verbally and diagrammatically; convex, concave lenses and the vergence of parallel light rays through them, simple optics of cylindrical lenses, axis and meridian of cylindrical lenses, prism and prism effect of decentered lenses.

E.002 Explain the function of each control on the automated and manual lensometer.

E.003 Demonstrate and apply an understanding of optics by making the necessary calculations to determine the power of corrective lenses with a manual lensometer.

E.004 Use a lensometer to perform the following: 1) adjust the eyepiece using a trial lens of a known power. 2) measure correctly, within +/-0.25 diopters, both the spherical and cylindrical components of corrective lenses in minus and plus cylinder format, and within 5 degrees of axis. 3.) mark the optical centers and detect the presence of prism or prism effect by decentration. 4.)measure amount and direction of prism and calculate induced prism using Prentice’s rule. 5.) calculate the bifocal add.

E.005 Record the calculations completely, clearly, and accurately in the appropriate place, using accepted abbreviations only.

01234 ????? F. Demonstrate a basic understanding of the refractive elements of the cornea as well as using an automated and manual keratometer.

F.001 Explain the radius of corneal curvature and how it is expressed.

F.002 Explain the dioptric power of the cornea and how it is expressed.

F.003 Explain the function of each control on the automated keratometer.

F.004 Define keratometry.

F.005 Explain the principles of dioptic reading and how the radius of curvature in

millimeters is usually used.

F.006 Explain the function of each control on the manual keratometer.

F.007 Clearly instruct and properly position the patient.

F.008 Accurately measure, within +/-0.25 diopters, the curvature of corneas with the manual keratometer: A.) Accurately calibrate the unit with the adjustment of the ocular. B.) Properly adjust instrument to determine axis. C.) Measure both power and axis for flat and steep K.

F.009 Record the measurements for each eye completely, clearly, and accurately in the proper place, using accepted abbreviations only. Record the power and axis of the flattest steepest meridians using the format outlined by the supervising ophthalmologist.

01234 G. ????? Perform pupil assessment to check the condition and response of the iris.

G.001 Describe the basic anatomy and function of the iris.

G.002 Explain the basic principles of neuro-opthalmology, with emphasis on the relation of the brain to iris function.

G.003 Describe the methods used to assess the pupil.

G.004 Outline the reaction of the Marcus-Gunn pupil.

G.005 Check the pupil's response to accommodation, direct light stimulus, consensual light stimulus, and swinging flashlight test. Reactions may be noted as light, poor, or none at all.

G.006 Record the size and shape of each pupil in normal and pathological conditions.

G.007 Record the information completely, clearly, and accurately in the appropriate place, using accepted abbreviations only.

01234 H. ????? Understand and be able to access the function of all muscles as they work together in all gaze positions and conduct stero acuity testing.

H.001 Describe the action of all six extraocular muscles.

H.002 Demonstrate and identify the nine diagnostic gazes.

H.003 Define fusion, diplopia, ductions, versions, vergences.

H.004 Explain the difference between: phoria and tropia, comitant and incomitant strabisumus, primary and secondary deviations.

H.005 Perform ocular motility tests using the nine diagnostic gazes.

H.006 Differentiate between phoria and tropia using cover tests.

H.007 Demonstrate the use of the Maddox rod and the Maddox wing.

H.008 Perform the Worth four-dot and interpret the results.

H.009 Perform the stereopsis test.

H.010 Assess patient's near point of convergence.

H.011 Record the information completely, clearly, and accurately in the space provided, using accepted abbreviations.

01234 ????? I. Perform a gross external examination to discover any general external abnormalities that can be associated with eye problems.

I.001 Identify facial abnormalities that can be associated with eye problems.

I.002 Explain the basic association between common external abnormalities and the eye.

I.003 Assess the symmetry of faces for abnormalities such as significant scars, or droopiness of the mouth or eyelids.

I.004 Compare palpebral fissure size and shape.

I.005 Check whether patients have a full and normal blink in each eye.

I.006 Record the information completely, clearly, and accurately in the appropriate place, using accepted abbreviations only.

01234 ????? J. Properly use the slit lamp microscope to illuminate structural elements of the eye for documentation.

J.001 Describe examining technique using different types of illumination: diffuse, sclerotic scatter, parallelepiped, retro illumination, optical section, conical and broad tangential.

J.002 Describe when a specific type of illumination is needed to correspond with the pathology.

J.003 Name and label all parts and structures of the slit lamp.

J.004 Properly adjust eyepiece.

J.005 Clearly instruct and properly position patients at slit lamp.

J.006 Perform external exam and record the information completely, clearly, and accurately in the appropriate place, using accepted abbreviations only.

01234 ????? K. Demonstrate a basic understanding of internal eye pressure and its implications, to understand how contact tonometry works, and to measure eye pressure when required.

K.001 Identify the range of normal eye pressure, and explain what problems abnormal eye pressure can signify.

K.002 Explain the function and operation of a tonopen.

K.003 Describe the production, flow, and drainage of aqueous humor.

K.004 Explain the need for normal intraocular pressure.

K.005 Define ocular hypertension.

K.006 Define glaucoma and its common classifications: congenital, acute, chronic, secondary, and low tension.

K.007 Describe the relationship of glaucoma to elevated intraocular pressure, disc changes, and visual fields defects. Explain why glaucomatous visual field changes occur.

K.008 Explain how application tonometry works by measuring the force required to flatten a known area of the cornea.

K.009 Explain the function and operation of the applanation tonometer.

K.010 Clearly instruct and properly position patients and then monitor their position and cooperation throughout the procedure.

K.011 Instill topical anesthetic and correct amount of flluorescein.

K.012 Perform applanation tonometry to correctly measure +/-1mm.Hg, the intraocular pressure of eyes: A) Prepare instrument and correctly align it B) Carefully manipulate tonometer while applanating the cornea. C) Repeat process when necessary to ensure accuracy.

K.013 Clean tonometer after each use to prevent infections from speading from one patient to another.

K.014 Record the information completely, clearly, and accurately in the appropriate place, using accepted abbreviations only. Include the following for each: A) which eye the information is regarding, B) intraocular pressure measurement, C) time of measurement, D) remarks on the patient's cooperation.

01234 ????? L. Assess the anterior chamber depth to determine whether a pupil can be safely dilated without causing a blockage of fluid.

L.001 Identify the common methods of assessing anterior chamber depth.

L.002 Explain how a shallow chamber poses a potentially critical situation if the pupil is dilated.

L.003 Using the flashlight procedure, estimate anterior chamber depth in eyes as shallow, moderate, or deep.

L.004 Using the slit lamp technique, grade chamber depth from 1 (shallow) to 4 (deep).

L.005 Record the information, including an indication of what method was used, completely, clearly, and in the appropriate place, using accepted abbreviations only.

01234 ????? M. Provide a permanent descriptive record of the size, shape and density of cataracts.

M.001 Explain what cataracts are in light of the common misconceptions associated with them.

M.002 Explain the general cause of each of the following types of cataract. A) senile, B) traumatic, C) secondary, D) congenital.

M.003 Describe several of the common symptoms a person with developing cataracts experiences.

M.004 Using a direct ophthalmoscope or slit lamp to look into cataractous eyes with fully dilated pupils, diagram the characteristics of cataracts as seen in the red reflex. Include the following in the diagrammatic record: A) the identity of the eyes, B) pupil size, C) opacity size, shape, and density of cataract.

01234 ????? N. Apply the fundamentals of ocular pharmacology in order to identify common ocular medications and their effects, and properly instill eye drops to patient's eyes insuring safety and comfort of patients.

N.001 Describe the forms of ocular medications and the factors which influence their action.

N.002 Describe the basic functions and effects of the following medications: A) mydriatic drops, B) miotic drops, C) topical anesthetic drops. D) glaucoma medications, E) steroids and non-steroidal anti-inflammatory drugs, F) antibiotics, G) sympathomimetics, H) parasympathomimetics, I) parasympatholytics, J) injectable ocular anesthetics and the accessory drugs used with them.

N.003 Describe possible allergic or other adverse reactions to the medications mentioned.

N.004 Describe how eye drops are safety and correctly instilled and explain the reason for these principles.

N.005 Clearly instruct patients on how they may respond to the eye drops being instilled.

N.006 Instill drops in patient's eyes safely and correctly, using proper techniques to facilitate patient comfort and to prevent dropper bottle contamination.

N.007 Demonstrate the ability to properly draw and label injectable into syringes for use by the physician and properly handle and dispose of sharps.

N.008 Completely, clearly, and accurately record, in the correct place, which drops were instilled in which eyes and at what time they were instilled. Use accepted abbreviations only.

01234 ????? O. Demonstrate instrument maintenance to help ensure that the instruments continue to work according to their design and to help assistants achieve a reasonable amount of independence as they use these instruments.

O.01 Describe the specific functions and the proper handling and care of each of the instruments commonly used by assistants in the work place.

O.02 Explain the details of preventative maintenance for each of the instruments commonly used by assistants in the work place.

O.03 Demonstrate consistent, proper handling and care of all instruments used: A) Show how instruments are kept clean. B) Show how instruments are cleaned when necessary.

O.04 Demonstrate the ability to maintain all instruments used: A) Point out signs or signals that may indicate necessary maintenance. B) Change bulbs, batteries, films, etc. when necessary.

01234 ????? P. Show a broad understanding of practical optics to understand the principles of light.

P.001 Explain the following general concepts: A) electromagnetic spectrum, B) range of visible light and their wave lengths, C) the properties and behavior of light (absorption, reflection, refractions, and diffraction).

P.002 Describe the vergence of light in relation to the following: parallel rays, convergence, divergence, vergence power in diopters, vergence of parrallel rays through a plus lens, a minus lens, and a cylindrical lens.

P.003 Define and explain the following: law of reflection, law of refraction, index of refraction, index of refraction, myopia, hyperopia, simple myopic astigmatism, compound myopic astigmatism, presbyopia, plane and curved mirrors.

P.004 Diagram the following: a plus and minus cylindrical lens incident with parallel light rays showing the axis of cylinder, meridian of power, orientation and position of a focal line.

P.005 Solve problems to determine the focal point of a lens, the dioptor power of a lens, focal length of a lens, understand and apply Prentice's rule.

P.006 Demonstrate the ability to transpose the sign of + cylinder to – cylinder, and determine the spherical equivalent of a sphero-cylinder lens.

P.007 Assist the near point of accommodation, accommodative range and presbyopia.

01234 ????? Q. Measure the subjective refractive of eyes, (refractometry.)

Q.001 Explain the difference between refractometry and refraction.

Q.002 Explain the function of each control on the refractometer.

Q.003 Clearly instruct and property position patients.

Q.004 Determine the starting point for refractometry using information from retinoscopy or other sources available in the patient's file.

Q.005 Using a phoropter, accurately perform refractometry. Refine the corrections and be proficient at each of the following: astigmatic dial, fogging, cross cylinder, duo chrome test.

Q.006 Record the refractometry results completely, clearly, and accurately in the appropriate plane, using accepted abbreviations only.

01234 ????? R. Demonstrate a working knowledge of the retinoscope to obtain an objective refraction of the eye.

R.001 Describe the vergence of light from the retinscope relative to the sleeve position.

R.002 Explain the signigicance of speed, width, and brightness of streak, and "with" and "against" movement.

R.003 Explain the need to relax a patients accommodation.

R.004 Explain how a retinoscope is correctly used to arrive at an objective refraction.

R.005 Clearly instruct patients.

R.006 Using a retinoscope, consistently arrive at correct objective refrations: A) correctly position phoropter/trial frames, B) maintain proper working distance throughout the procedures, C) neutralize least "with" or most "against" movement, with sphere lenses. D) neutralize opposite meridian with cylindrical lenses, and put correct amount of cylinder in place. E) remove appropriate dioptric equivalent for working distance at the end of procedure. F) refine using the subjective methods of refractometry.

01234 ????? S. Describe steps to be taken in emergency/urgent patient screening where immediate treatment may be necessary.

S.001 Explain what factors indicate an emergency situation where the patient should be seen immediately by the physician without any preliminary testing.

S.002 Explain what tests may need to be preformed initially in particular emergency or urgent cases.

S.003 For cases that may require immediate attention, take a short patient history to obtain only pertinent information.

S.004 Demonstrate the knowledge and perception to direct patients to a physician immediately when this is necessary.

S.005 When necessary and safe, perform the tests required to aid the physician's diagnosis.

01234 ????? T. Show ability to educate patients to ensure that they are well informed about all important aspects of their eyes and the care being offered throughout their experience at the medical center.

T.001 Describe the principles of basic eye care.

T.002 Describe the basic treatments for common eye problems.

T.003 Describe the basic procedures of all types of surgery commonly performed by the surgeon at the place of employment. Demonstrate a knowledge of the surgical experiences so patients can be informed about appointment schedules, etc..

T.004 Explain the use of each of the following: oral and topical antibiotics, oral and topical steroids, mydriatics, miotics and other glaucoma medications.

T.005 Educate patients on important aspects of eye care, as appropriate in each situation. Promote good preventative eye care and awareness by ensuring they have an adequate understanding of: principles of basic eye care, testing procedures being performed, eye treatment or surgery, individual instructions.

T.006 Show a keen perception to each patient's ability to understand, considering such factors as age, ability to hear, cultural backgrounds, physical and mental states, etc..

01234 ????? U. Ability to map the scope of vision of the eyes to detect abnormal blind spots using the Humphery and Goldmann visual field machines, as well as perform a confrontational visual field analysis.

U.001 Review the basic anatomy and physiology of the visual pathway.

U.002 Define visual field and isopter.

U.003 Diagram the course of fibers from the retina through the visual pathway.

U.004 List and describe the classical defects of the visual pathways (e.g. Glaucoma, chasmal, radiations, and occipital.)

U.005 List and describe the various types of visual field defects and outline the corresponding damage in the visual pathway (e.g. Hemianopsia, guadrantanopsia, homonymous, congruous and incongruous.)

U.006 Describe the following visual field testing techniques: Amsler grid, tangent screen, perimeters.

U.007 Explain the difference between: kinetic and static testing, absolute and relative defect, steep and sloping defect, contraction versus depression or scotoma.

U.008 Describe the size and shape of a normal visual field and locate and explain the reason for the physiological blind spot.

U.009 Explain the function of each control on an automated and Goldmann perimeter.

U.010 Clearly instruct and properly position the patient.

U.011 On an automated perimeter, perform visual field tests using the following: full field, central field, peripheral and central threshold test. Record the the results on disk and produce a printout.

U.012 On a Goldmann perimeter, calibrate the instrument and perform visual field test. Use kinetic and static testing to conduct a peripheral and a central visual field test with designated size and intensity. Record name, date, target size, patient fixation, pupil size, and diagnosis on test for each patient.

U.013 Perform an Amlser grid visual field test.

U.014 Perform a confrontational visual field test.

01234 ????? V. Inform patients about the types, the characteristics, and the wearing considerations of contact lenses.

V.001 Describe the characteristics, including the advantages and disadvantages of each of the following types of contact lenses: PMMA, gas permeable, soft, toric, extended wear.

V.002 Explain what factors influence contact lens fitting.

V.003 Describe the care and maintenance of various types of contact lenses.

V.004 Demonstrate the ability to properly to insert and remove various types of contact

01234 ????? W. Identify various surgical techniques to gain a general understanding of the common procedures performed and, thereby, realize the potential and the limitations of modern ophthalmic surgery.

W.001 Describe the common procedures performed, the reasons for performing them, and the effects achieved by the procedures on each of the following parts of the eye: cornea, sclera, lens, iris, retina, eye muscles, eye lids.

W.002 For each of the surgical procedures commonly performed by the ophthalmologist for whom the assistant is working, discuss the following in enough detail to reveal a deep understanding:

WW.001 The specifics of the procedure, step by step.

WW.002 The reasons the surgeon performs the surgery in this particular way, if there are other ways to perform the same operation.

WW.003 What the surgical experiences are like for the patients, preoperatively, operatively, and postoperatively.

WW.004 The possible complications and side effects of the procedures and the

likelihood of them occurring.

01234 X. ????? Identify minor surgical instruments and their uses, to care for them, and to prepare the way for surgical assisting.

X.001 Identify the following instruments and describe their general function:

lacrimal dilator, probe, and cannula

foreign body spud and burr

scalpel blade and handle

chalazion clamp and currette

lid speculum/retractor

various gauge needles

X.002 Explain the difference between cleaning/disinfecting and sterilization.

X.003 Explain why sterilization is necessary.

X.004 Describe each of the sterilization methods:

Gas

Chemical

Autoclave

X.005 Define asepsis and sterile field.

01234 Y ????? Apply the fundamentals of ophthalmic photography and and produce clear images with a fundus camera.

Y.001 Explain the uses and the procedures of the following types of ophthalmic photography and identity and interpret photos from each category:

fundus

slit lamp

external

fluorescein angiography

Y.002 Identify red-free and green-free photos.

Y.003 Describe the flow of fluorscein through the patient and be able to label the four phases of the angiogram: arterio, arterio-veinous, veinous, and late.

Y.004 Understand the general mechanics of a camera including such terms as apperature, lens, film transport, mirror, shutter, focal length, lens speed, depth of field, resolution, shutter speed, film speed, and exposure.

Y.005 Identify the structures of the posterior pole: optic nerve, superior archade, inferior archade, macula, arteries, veins, capillary bed, and fovea.

Y.006 Identify the seven views of the fundus: posterior pole, disk, superior nasal, superior temporal, temporal, inferior temporal, and inferior nasal.

01234 ????? Z. Demonstrate Proper use a A-scan ultrasongraphy to measure the length of eyes and, along with keratometry, calculate the power of intraocular lenses to be used in cataract surgery.

Z.001 Explain the importance of A-scan measurements for cataract and refractive surgery.

Z.002 State the tissue velocity and identify the echoes for each of the following, phakic eye, pseudophakic eye, aphakic eye.

Z.003 Demonstrate how intraocular lens calculations are made from A-scan and keratometry readings.

Z.004 Clearly instruct and properly position patient.

Z.005 Perform a-scan ultrasonography safely and accurately on eyes.

Z.006 Take a photo or print a display of the CRT display.

Z.007 Calculate the IOL power from the axial length, keratometry, and A constant or estimated post-op AC depth.

Works Cited:

Bloom, B.S., Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1974). Taxonomy of Educational Objectives, New York: David McKay Company.

Clark, John COMT, Lens, Al OA Trainer, Walsh, Meg Bsc, COMT, (1989). Ophthalmic Assisting Guide a Record of Competency. Calgary, Alberta, Canada: Gimbel Educational Services.